

Work Order ID 85146

June-04-12 1:28:08 PM

85146

Page 1

Item ID: D350-636-015

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: M LJDate: 12/06/04 Tooling:

Date:

Run

Start

NR1

QC:

Date: SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3492	C								
D4168	A								
IIN-D350-636	I								

100

0.00

100

DOCUMENT CONTROL

Memo

0.00

Photocopy blue file and type labels per PPP D350-636-015 CHG 003

DC

Document Control

N/A

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: NC Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85146

June-04-12 1:28:08 PM

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Page 2

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Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
						Stop	*NR2*
	QC:	Date:	SPC (Y/N):	Date:			

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1- Pick D2600-3 Bent	BE 12/06/28							
	2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168		BE 12/06/28						
	3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr, section H-H			BB 12/06/03					
	4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting, section H-H								
	5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as per dwg D4168, detail A		BE 12/06/28						
	6- Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)								
	7- Clecko DT8863B on second side of tube and drill pilot holes for detail B. ***SECOND SIDE***			BB 12/07/03					
	8- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole.								
	9- Open up holes of Detail A to 0.297" (total of 2 holes per side) and .201" (total of 1 hole per side) open holes of detail D section H-H to 0.500" as per dwg D4168								
	10-Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left from bending as per QSI 004		BE 12/06/28						

W/O:		WORK ORDER CHANGES					
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June-04-12 1:28:08 PM

85146

Page 3

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N900040100Setup Start ***NS1***

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop ***NS2***Start Date: 04/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
A/R Aluminum Rod batch: <u>M122130</u> 11-Grind welds flush as per Dwg D4168									

120

120

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

S.7 6/7/11

130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S.7 6/7/11(X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 85146

June-04-12 1:28:08 PM

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Page 4

Item ID: D350-636-015

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Setup Start

NS1

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

NS2

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* HandFinish	Chemical Conversion Coat per QSI005 4.1 Memo	0.00				1	26	12-7-12	
150 *150* QC Quality Control	QC3- Inspect Part Finish QC7 Memo	0.00				(1)	SAD	12-07-13	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
12-07-13	150	Change Q ₃ to Q ₂							

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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June-04-12 1:28:08 PM

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Page 5

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NS1

Stop

NS2Revision ID:
Item Name: Skidtube STD w/ Training Wearplates, LHStart Date: 04/06/2012 Start Qty: 1.00 ***1***
Required Date: 18/06/2012 Req'd Qty: 1.00 ***1***

Cust Item ID:

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
160	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open up holes of Detail C and ground handling section AL-AL to 0.625" (total of 8 holes per side) as per dwg D4168.								
	2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D4168.								
	3- Open float hole to 0.500" (4 per side) section AJ-AJ								
	Open wearplate holes to size as per dwg (4 holes per sides), section CG-CG								
	4-Chamfer holes of Detail B, C, ground handling section AL-AL and float holes section AJ-AJ per dwg D4168 (welding instructions on sheet 8)								
	5-Deburr and blow out all chips from inside of tube								
	6- Prepare tube for welding, remove alodine as required.								
	7-Bond web D2739 in place as per QSI 015 A/R Sikaflex-291 batch: <u>121409</u> exp. date: <u>13-4-12</u>								
	8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1 & QSI004 (welding instructions on sheet 8) A/R Aluminum Rod batch: <u>M122130</u>								
	9- At section AJ-AJ drill out x-bolt spacer to 0.404"								

12/07/13

- DE 12/07/13

ZBB 12/07/13

W/O:		WORK ORDER CHANGES					
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June-04-12 1:28:08 PM

85146

Page 6

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Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
						Stop	*NR2*
	QC:	Date:	SPC (Y/N):	Date:			

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

10-Grind welds flush as per Dwg D4168 **SAD**

11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D4168, section AL-AL

12- C'bore section CG-CG

13- Deburr holes

***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING
HOLE IN TUBE *****

170

QC10- Inspect visual per QSI004- ground welds

0.00

0.00 (**DAS**
16
9-89)

14125

170

QC

Quality Control

Memo

3 SAD 12-07-20
 Yes → DP 12-7-25

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Work Order ID 85146

June-04-12 1:28:08 PM

85146

Page 7

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Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

180

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

DAS
16
9-69

17/6/25

190

190

HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

1 26 12-7-25

Memo

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200

200

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

7:30 00F
START TIME: 320
OVEN TEMPERATURE:
FINISH TIME: 8:00

LXJ

MT
12/6/26

W121841

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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June-04-12 1:28:08 PM

85146

Page 8

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Start

NS1

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates. LH

Start Date: 04/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
Description

210

QC3- Inspect Part Finish

210

QC

Quality Control

220

220

HandFinish

HandFinishing

Hand Finishing

Memo

✓ Inspect for foreign object per QSI 024

Set Up/
Run Hours

Tool ID

Tool #

Plan

Accept

Reject

Reject

Number

Stamp

1 hr / M. 12/07/30

0.00

0.00

0.00

1 R/H / M. 12/07/30

0.00

0.00

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Appróval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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June-04-12 1:28:08 PM

85146

Page 9

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Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

230

230

HandFinish

Hand Finishing

Memo

0.00

LHL 4-207/31

- ✓ 1-Inspect for Foreign Objects
- ✓ 2-Spray inside of tube with "LPS-3" batch: 1010

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168

✓ SIKA FLEX 241

BATCH: 11177140
EXP DATE: 14103

✓ 4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: 1110348

✓ 5-Coat all exposed fasteners with "LPS Procyon" batch: 1114596

240

240

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

DAS
16
9-83 11/07/01

0.00

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Appróval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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June-04-12 1:28:08 PM

85146

Page 10

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Cust Item ID:

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Customer:

Reference:

Approvals: **Process Plan:**

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

250

250

Packaging

Memo

0.00

0.00

[Signature]

12-8-12

Packaging

If making a D350-636-215
pick kit will only require:
1 X AN3C37A
1 X AN3C34A
1 X AN3C42A
2 X D3493-1

260

QC4- 100% Inspect kits for completeness

0.00

*DAS 16
9-89*

12/8/09

260

QC

Quality Control

Memo

*****ensure antiseize is on AN8C21A bolts*****

270

Packaging

0.00

12/8/10

270

Packaging

Memo

Identify and pack for shipping as per PPPD350-636-015

Location: _____

PPP rev: _____

W/O:		WORK ORDER CHANGES							
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June-04-12 1:28:08 PM

85146

Page 11

Item ID: D350-636-015

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N900040100

Setup

Start

NS1

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

NS2

Start Date: 04/06/2012 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 18/06/2012 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:**

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

280

QC21- Final Inspection - Work Order Release

0.00

280

QC

Quality Control

Memo

0.00

12/8/10 JH

12/8/10

W/O:		WORK ORDER CHANGES					
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Picklist Print

June-04-12 1:28:12 PM

Work Order ID: 85146

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

85146
D350-636-015

Page 1

14

Start Date: 04/06/2012

Start Qty: 1.00

Required Date: 18/06/2012

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC IPP Rev:B
11.04.14 ecn11-553 DD verf:EC IPP Rev:C 11.10.18 as per
NCR 11-906 DD verf:EC IPP Rev:D 112.04.16 AS PER ECN 12-
542 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C34A		Purchased	No			230	Each	41.0000	1	1	50	10/8/8	SP

AN3C34A
BOLT

Location Loc Qty Loc Code

ST353	41	
116075	21	
117514	20	

AN3C36A	Purchased	No		230	Each	162.0000	4	4	**	41	1204130
---------	-----------	----	--	-----	------	----------	---	---	----	----	---------

AN3C36A
BOLT

Location Loc Qty Loc Code

FG	4	
101261	4	
ST353	158	
116590	0	
119083	2	
119324	23	
121388	33	
121389	50	XW
121689	50	

W/O:		WORK ORDER CHANGES					
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June-04-12 1:28:12 PM

Page 2

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Parent Item Name: Skidtube STD w/ Training Wearplates, LH

85146
D350-636-015

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C37A

Purchased No 230 Each 141.0000 1 1

**

MI2158454



AN3C37A

BOLT

Location	Loc Qty	Loc Code
ST354	141	
116874	11	
117010	2	
120422	3	
121068	75	
121585	50	

AN3C42A

Purchased No 230 Each 32.0000 1 1

**

JF
SCH

AN3C42A

BOLT

Location	Loc Qty	Loc Code
ST354	32	
106176	1	
120464	6	
121103	25	

D3492-1

Manufactured No 230 Each 257.0000 8 8

**

PL 12/02/30

D3492-1

Plug

Location	Loc Qty	Loc Code
FP002	242	
69531	8	
74444	2	
76235	4	
83259	228	Y6
FP-A	15	
83098	15	

W/O:		WORK ORDER CHANGES							
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:12 PM

Page 3

Work Order ID: 85146

85146
D350-636-015

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3492-3

Manufactured No

230

Each

167.0000

8

8

**

HL u107130

D3492-3

Plug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP-A	167	B851461
81967	5	X6
83099	40	
83529	122	

D3873-1

Manufactured No

230

Each

462.0000

7

7

**

HL - 12107130

D3873-1

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST057	6	
79561	6	
ST067	456	
64760	1	
68247	4	
73829	19	
73830	2	
76791	410	Y7
79560	20	

D4154-041

Manufactured No

230

Each

0.0000

1

1

**

B83693(X1) HL u107130

D4154-041

Wearplate Assembly

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:12 PM

Page 4

Work Order ID: 85146

Parent Item: D350-636-015

85146
D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates. LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D4170-1

Manufactured No

230

Each

95 0000

4

4

**

D4170-1

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

LG	50	
82222	50	4
LG001	45	
71844	5	
82043	40	

D4171-1

Manufactured No

230

Each

22.0000

1

1

**

D4171-1

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST104	22	
77008	2	
82385	20	V41

MS21043-3

Purchased No

230

Each

1.557.000

4

4

**

MS21043-3

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FG	72	
103691	72	
GA	14	
120693	14	
ST301	1471	
118077	2	
118614	51	
118686	30	
119758	20	
121255	368	
121708	1000	V41

June-04-12 1:28:13 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Page 5

Work Order ID: 85146

Parent Item: D350-636-015

85146
D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates. LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0363R

Purchased

No

230

Each

2,958.000

8

**

87
M 110713

Washer

NAS1149C0363R

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST297	2958	
114742	2958	

NAS1515H3L

Purchased

No

230

Each

146.0000

4

**

X7
M 1107130

*NAS1515H3L *

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	40	
102472	40	M1122151
ST277	106	
118686	3	
119438	1	
120360	11	
121243	2	
121556	89	

NAS1611-010

Purchased

No

230

Each

188.0000

8

**

M 1107130

NAS1611-010

O-RING

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	188	
110915	14	
117460	8	
118077	1	
118612	3	M122151
119438	47	
121259	2	
121415	4	
121584	59	
121723	50	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Work Order ID: 85146

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

85146
D350-636-015

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased No

230

Each

361.0000

8

8

**

AL 116730

NAS1611-013

O-RING

Location	Loc Qty	Loc Code
FP001	361	
116582	5	
117291	2	
117887	53	
119623	36	
121584	15	
<u>121825</u>	200	X8
121826	50	

NAS1149D0863J

Purchased No

250

Each

251.0000

2

2

**

AL 116730

NAS1149D0863J

WASHER

Location	Loc Qty	Loc Code
ST298	251	
<u>118078</u>	34	
119307	17	V2
120308	100	
121556	100	

D2744

Manufactured No

110

Each

35.0000

1

1

**

BE 120628

D2744

Cap

Location	Loc Qty	Loc Code
LG002	35	
62715	1	
78900	3	
83412	31	/

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Work Order ID: 85146

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

85146
D350-636-015

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

29.0000

1

1

**

D2600-3-RFNT

Extrusion Bent

BE 12/06/28
B86330 x1

Location	Loc Qty	Loc Code
LG	29	
66875	7	
73253	1	
75021	1	
75022	1	
75023	1	
81330	4	
83305	1	
83442	13	

D2743

Manufactured No

160

Each

296.0000

8

8

**

D2743

Crossbolt Spacer

BE 12/07/19
B85459 x8

Location	Loc Qty	Loc Code
LG	222	
81965	55	
83262	167	
LG001	74	
67766	4	
68251	3	
73403	64	
74445	1	
79517	2	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Page 8

Work Order ID: 85146

85146
D350-636-015

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates. LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2739

Manufactured No

160

Each

13.0000

1

1

**

06/12/07/13
①

D2739

350 I Beam

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	13	
72155	1	
81508	1	
83447	4	
83448	5	
83548	2	

D3490-3

Manufactured No

160

Each

46.0000

4

4

**

06/12/07/19
B85420 x4

D3490-3

Cross Bolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	46	
83313	46	

D3490-1

Manufactured No

160

Each

45.0000

4

4

**

06/12/07/19
B85419 x4

D3490-1

Cross Bolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	2	
81976	2	
LG001	43	
62450	2	
74875	4	
77042	3	
83269	34	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Page 9

Work Order ID: 85146

Parent Item: D350-636-015

85146
D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-225

Purchased

No

230

Each

781.0000

4

4

**

Al 1202130

AI S4-1032-225 ✓ /

Insert

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST281	758	
108696	146	A122290
110768	62	X4
118386	55	
118966	68	
121269	427	
ST282	23	
120410	10	
120451	13	

AN8C35A

Purchased

No

230

Each

68.0000

1

1

**

Al 1202130

AN8C35A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	67	
115960	1	
118286	16	
121275	50	
ST346	1	X1
114442	0	
115188	0	
115960	1	

D3488-041

Manufactured

No

230

Each

9.0000

1

1

**

Al 1202130

D3488-041

Blade Fitting Assembly, LH

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	9	
61689	1	
82271	8	

BW580 J

X1

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Page 10

Work Order ID: 85146

85146
D350-636-015

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN6C44A

Purchased

No

230

Each

86.0000

4

4

**

SL nloz30

AN6C44A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	2	
103964	2	y811222041
ST343	84	x1
121013	11	
121167	13	
121440	50	
121689	10	

MS21083C8

Purchased

No

230

Each

81.0000

1

1

**

SL nloz30

MS21083C8

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
304	75	
121185	29	
121349	46	y1
FP002	1	
115884	1	
ST303	4	
115884	0	
118077	1	
119309	2	
119638	1	
ST304	1	
121524	1	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Page 11

Work Order ID: 85146

85146
D350-636-015

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3631-1

Manufactured No

230

Each

347.0000

8

8

**

D3631-1

Washer

M 16073

Location	Loc Qty	Loc Code
----------	---------	----------

FG	332	
----	-----	--

81874	2	
-------	---	--

<u>83588</u>	330	
--------------	-----	--

ST072	15	
-------	----	--

68062	2	
-------	---	--

75548	13	
-------	----	--

X 8

AN960C10L

NAS1149C0332

Purchased

No

230

Each

0.0000

4

4

AN960C10I ✓

washer

M 122063 **

(x4) M 12073

D2745

Manufactured

No

230

Each

122.0000

8

8

D2745

Bushing

**

M 12073

NAS1149C0832R

Purchased

No

230

Each

257.0000

1

1

NAS1149C0832R

WASHER

**

M 12073

Location	Loc Qty	Loc Code
----------	---------	----------

ST297	257	
-------	-----	--

114915

257	
-----	--

X 1

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Work Order ID: 85146

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

85146
D350-636-015

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased No

230

Each

451.0000

4

**

4

4

HL 1207130

AN3C6A

BOLT

Location	Loc Qty	Loc Code
----------	---------	----------

FP001	1	
111982	1	
ST351	450	
111982	2	
116419	23	
116549	2	
116704	12	
117619	10	
117688	1	
117872	5	
118422	13	
119449	21	
120423	3	
120693	158	
121682	200	

MS21043-6

Purchased No

230

Each

618.0000

4

4

**

HL 1107130

MS21043-6

NUT

Location	Loc Qty	Loc Code
----------	---------	----------

FG	20	
103693	20	
ST301	598	
117887	2	
118384	96	
120308	500	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Page 13

Work Order ID: 85146

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

85146
D350-636-015

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3493-1

Manufactured No

250

Each

127.0000

2

2

**

D3493-1

Washer

SD
12-8-8 SP

Location	Loc Qty	Loc Code
ST050	127	
77573	1	
82023	26	
<u>83097</u>	100	

MS21083C8

Purchased No

250

Each

81.0000

2

2

**

MS21083C8

NUT

SL 12/02/13

Location	Loc Qty	Loc Code
304	75	
<u>121185</u>	29	
<u>121349</u>	46	VZ
FP002	1	
115884	1	
ST303	4	
115884	0	
118077	1	
119309	2	
119638	1	
ST304	1	
<u>121524</u>	1	

AN8C21A

Purchased No

250

Each

57.0000

2

2

**

AN8C21A

BOLT

SL 12/02/13

Location	Loc Qty	Loc Code
ST343	57	
<u>118758</u>	3	VZ
<u>121167</u>	4	
121275	50	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-04-12 1:28:13 PM

Page 14

Work Order ID: 85146

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

85146
D350-636-015

Start Date: 04/06/2012

Start Qty: 1.00

Required Date: 18/06/2012

Required Qty: 1.00

D2741

Manufactured No

250

Each

20 0000

1

1

**

MSL

W67136

D2741

Blade, 350 Skidtube

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
ST	-10	B83135	
ST466	30	✓1	
71856	1		
79516	19		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
D	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
.4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-8	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- 8) WELD PER DART QSI 004
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 11) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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NO. 85146 MLJ
12/06/04

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A	NEW ISSUE	SC	10.08.09
REV.	BY	DATE	
DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	(initial)	DRAWING NO.	REV. A
MFG. APPR.	(initial)	D4168	SHEET 1 OF 11
APPROVED	(initial)	TITLE	SCALE
DE APPR.	(initial)	350 SKIDTUBE ASSEMBLY	NTS
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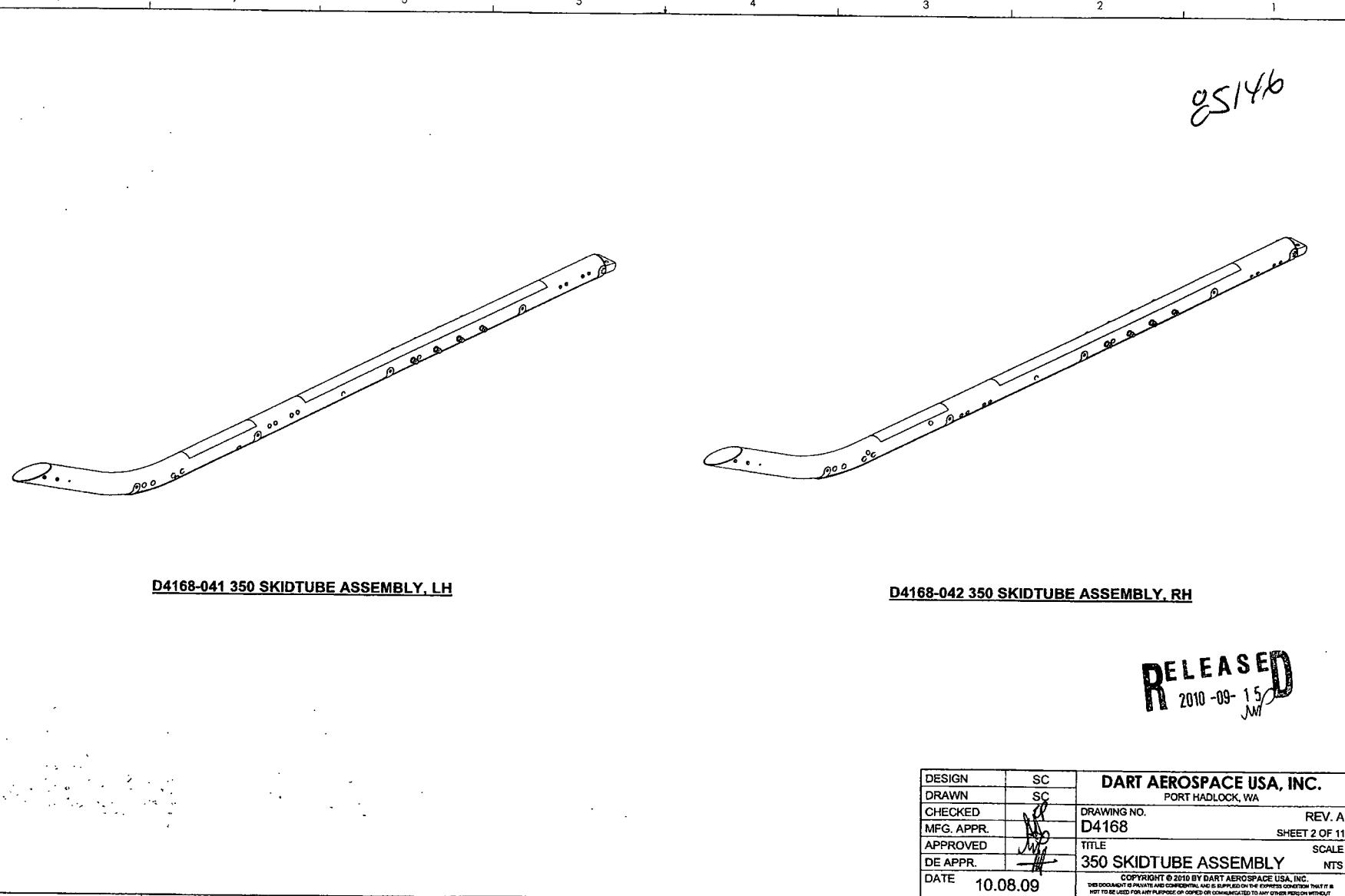
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



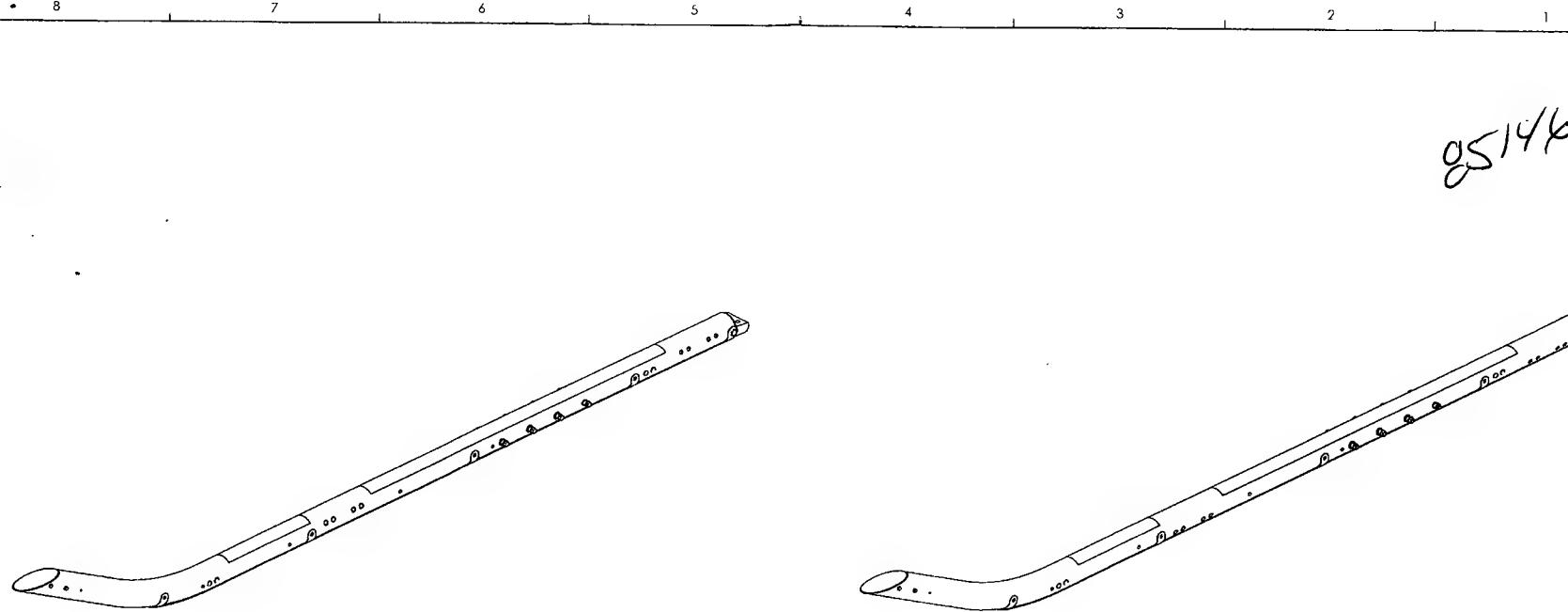
W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D4168-043 350 SKIDTUBE ASSEMBLY, LH

D4168-044 350 SKIDTUBE ASSEMBLY, RH

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R 2010-09-15
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APPROVED	SC	TITLE	SHEET 3 OF 11
DE APPR.	SC	350 SKIDTUBE ASSEMBLY	SCALE
DATE	10.08.09	NTS	NTS

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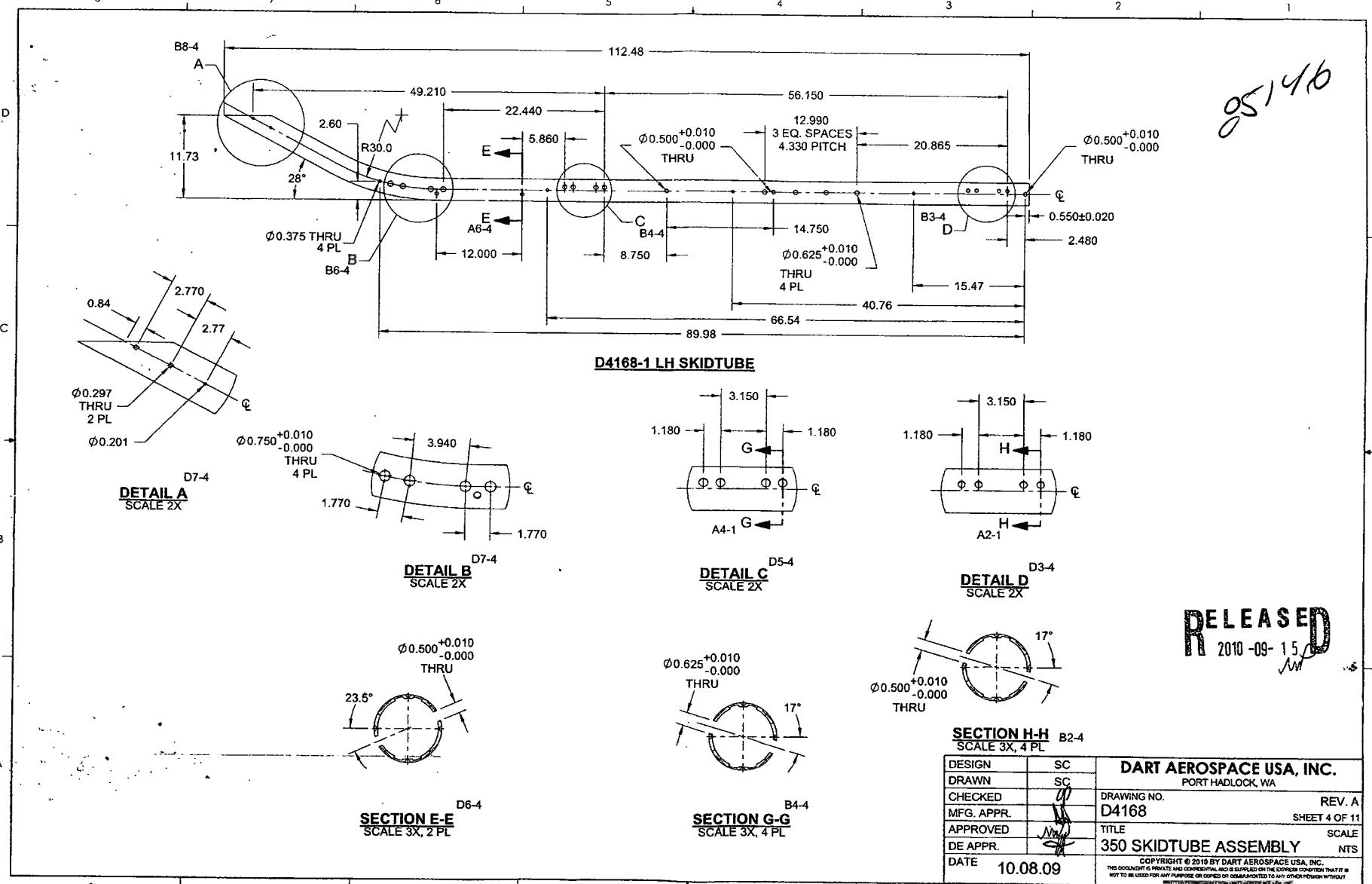
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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2010-09-15

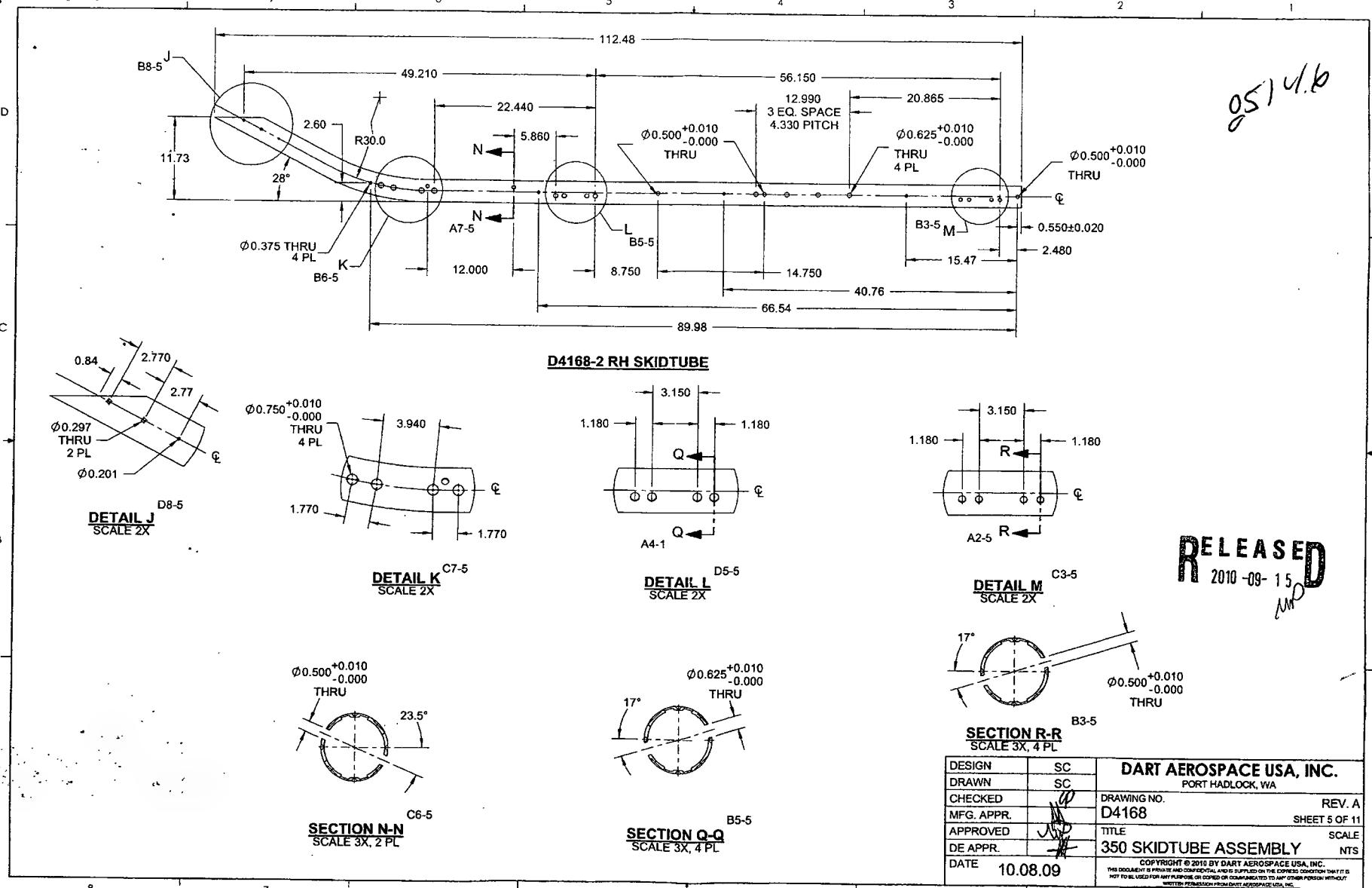
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries



051 v.6

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APPROVED	<i>(initials)</i>	TITLE	SCALE	
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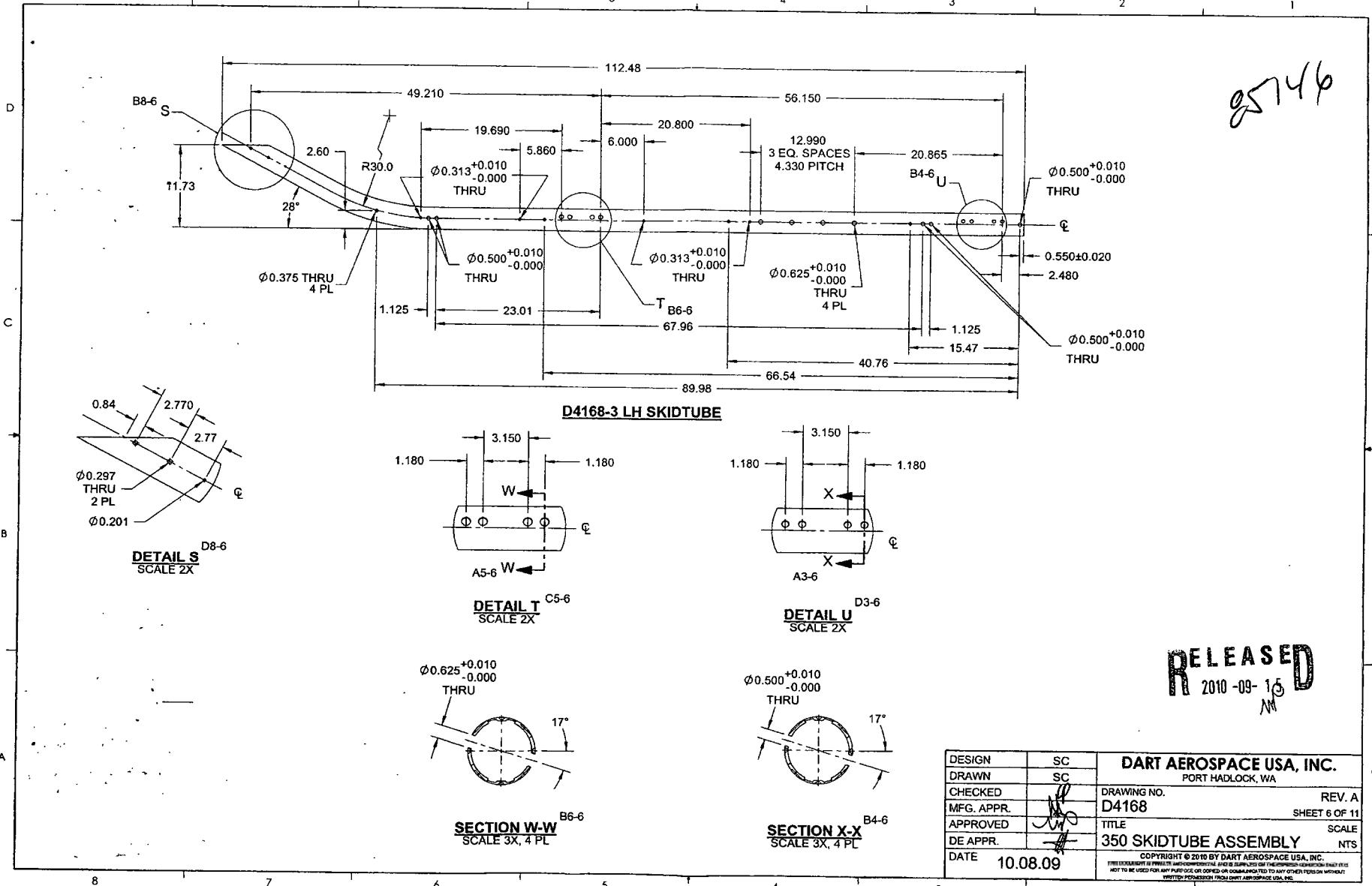
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DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries



DESIGN	SC	DART AEROSPACE USA, INC.
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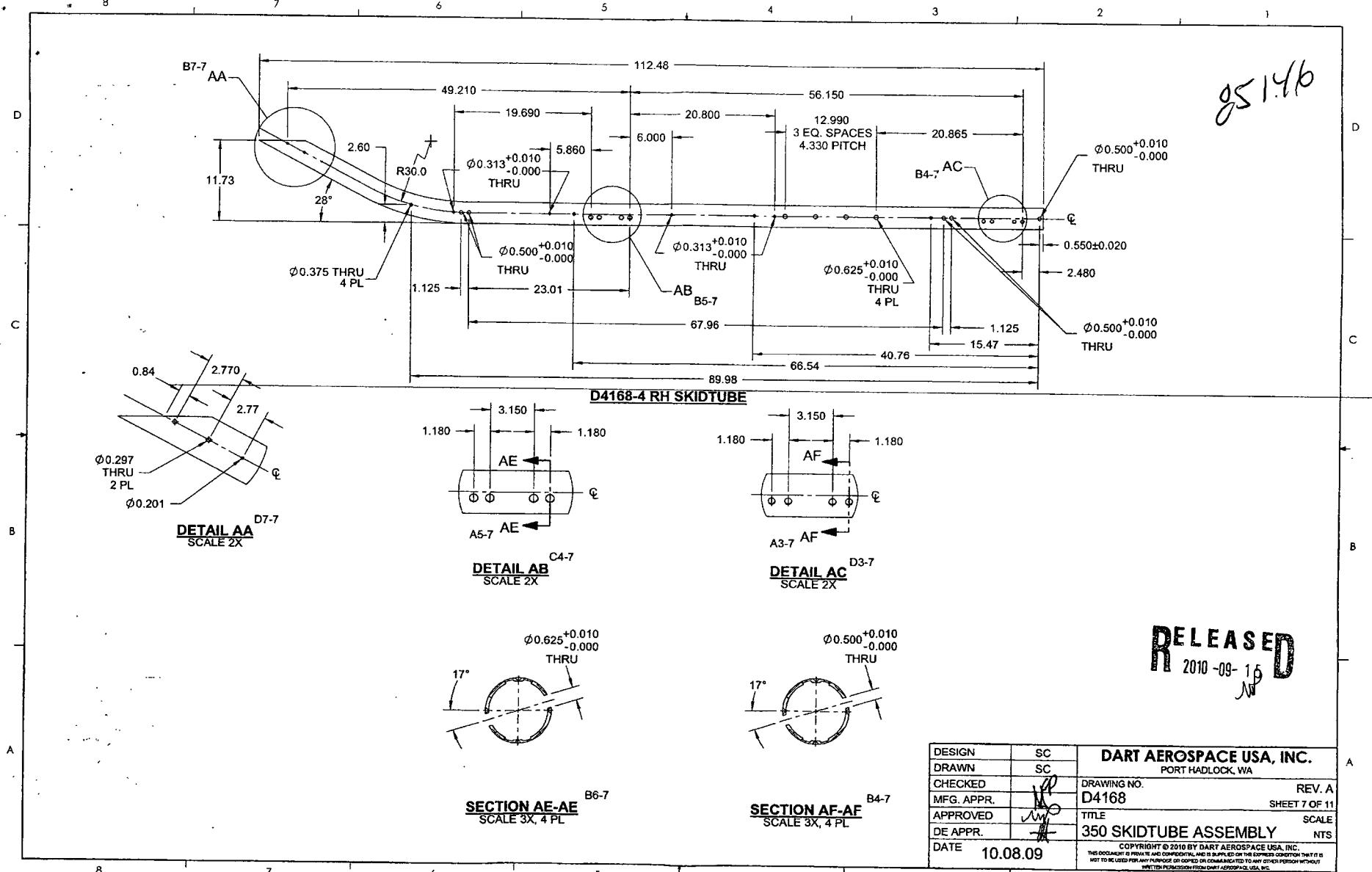
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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gs 14/b

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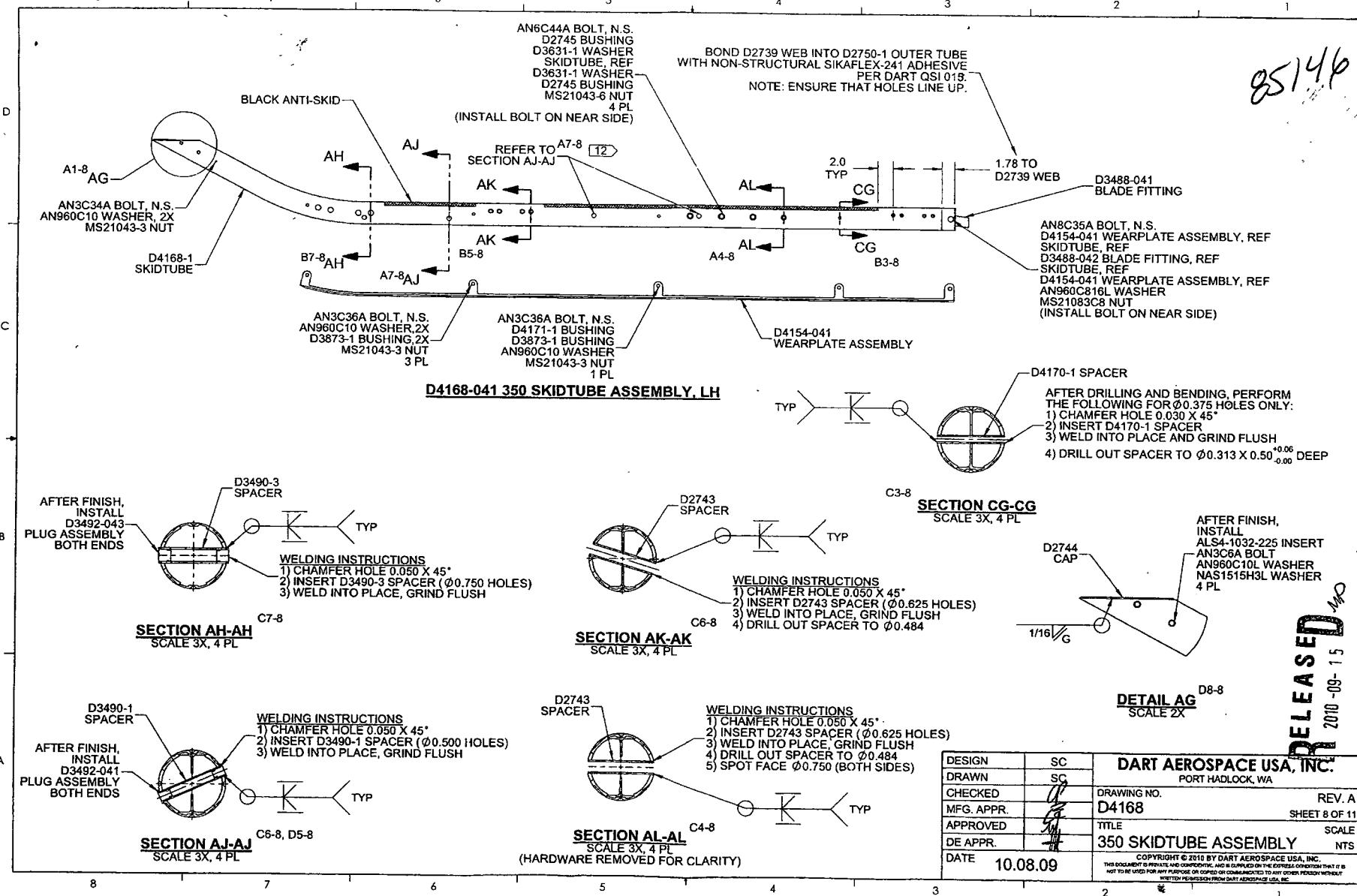
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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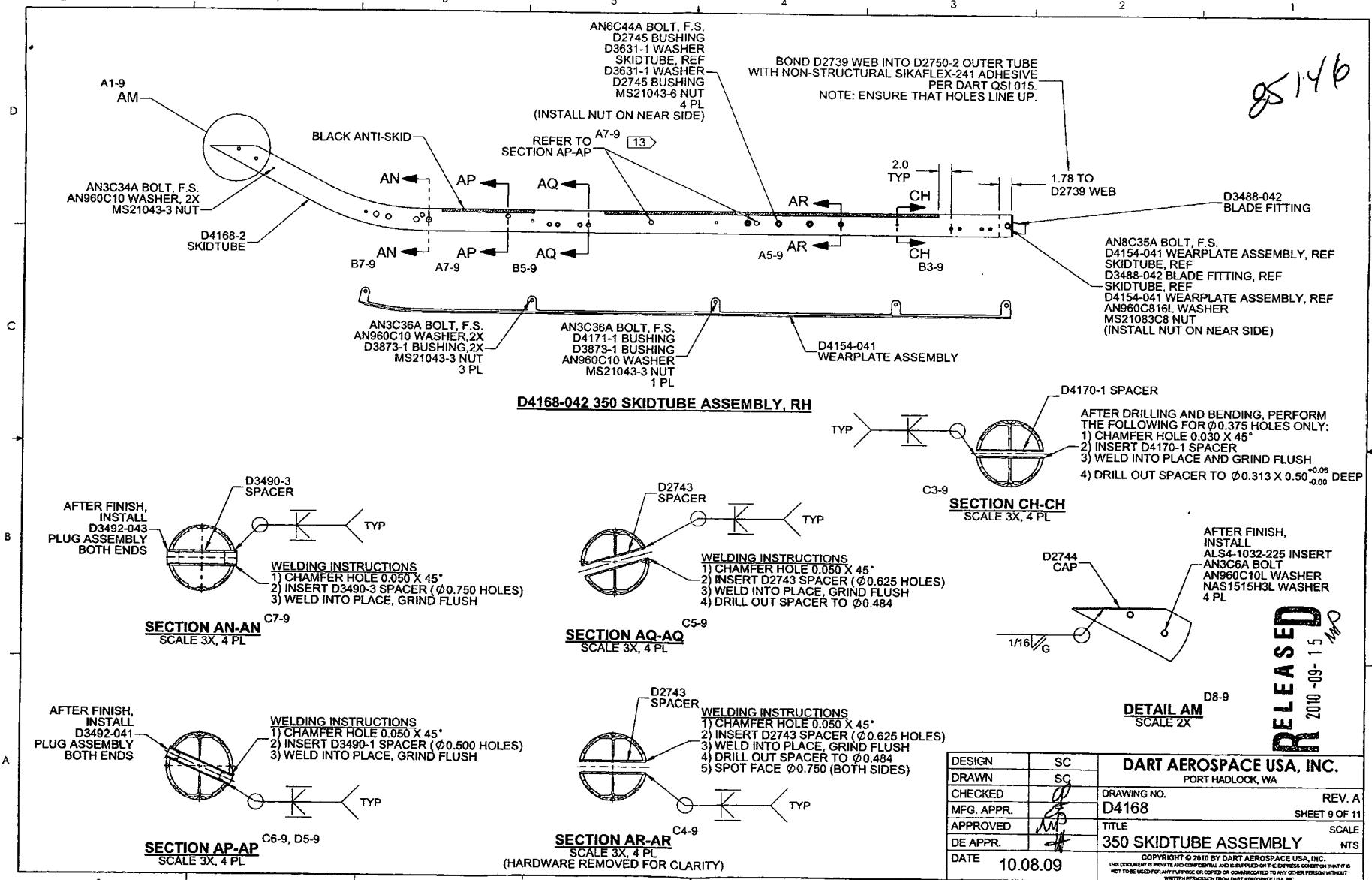
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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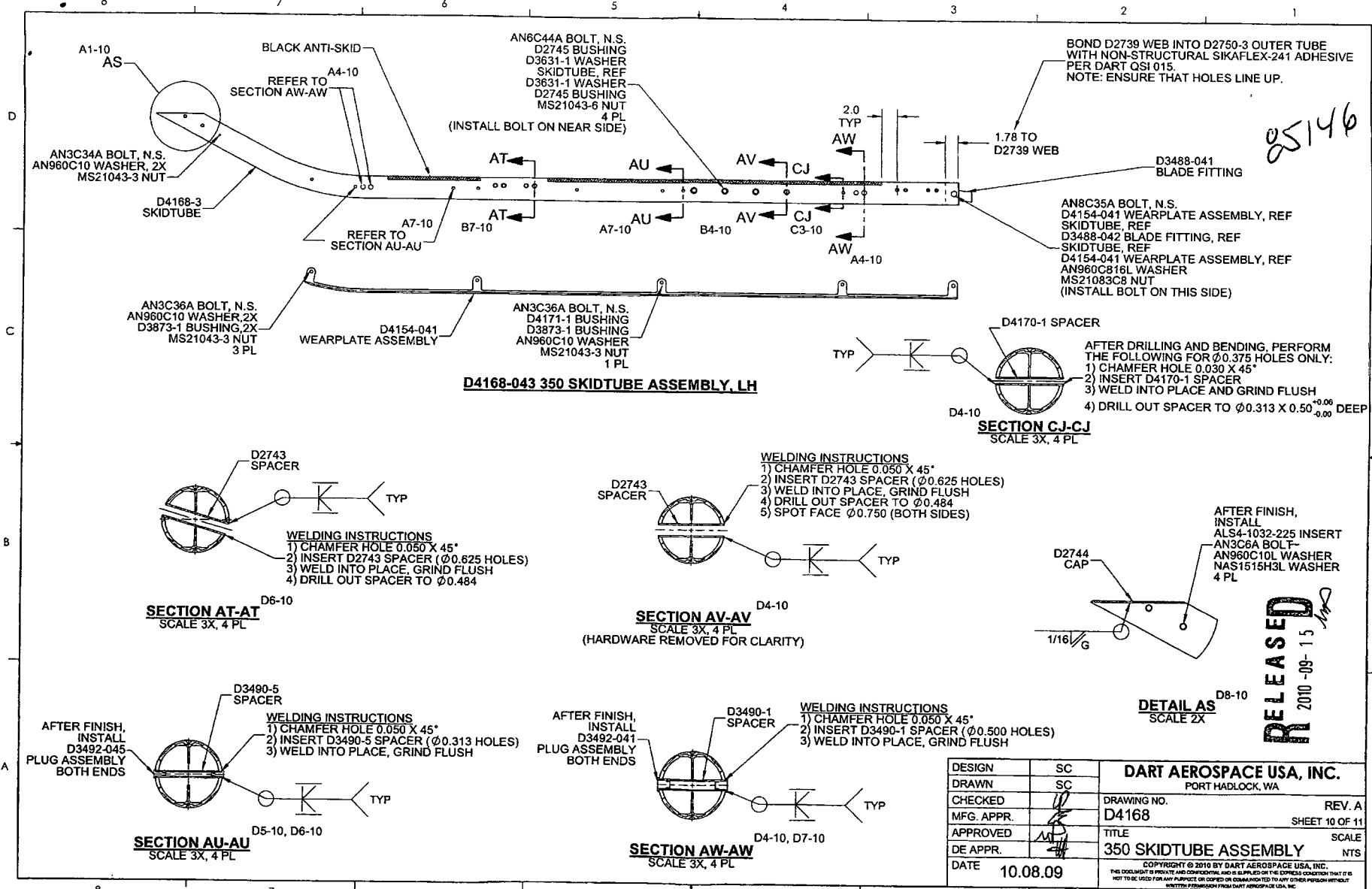
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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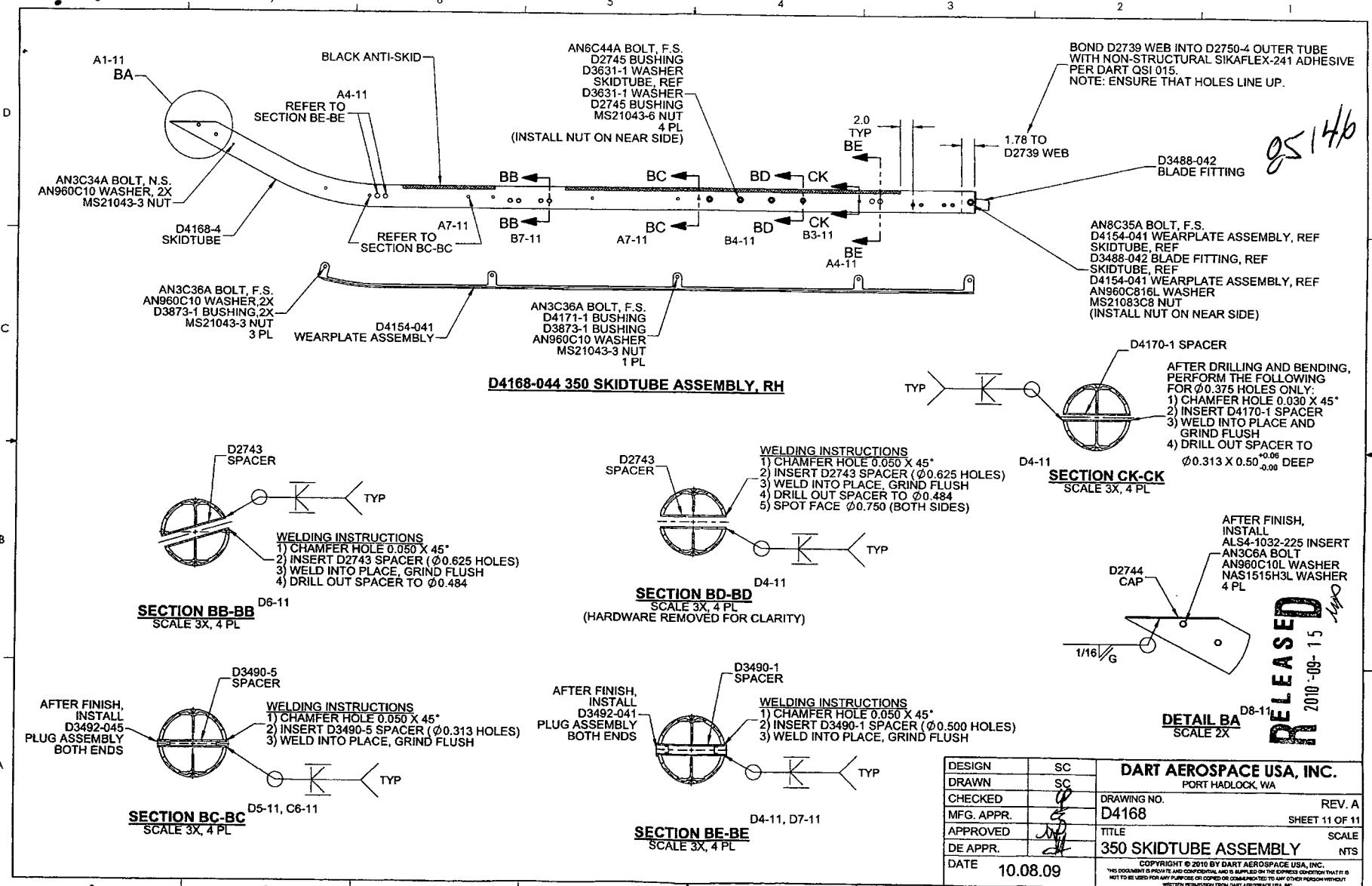
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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MFG. APPR.	<i>[Signature]</i>	D4168
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DE APPR.	<i>[Signature]</i>	SHEET 11 OF 11
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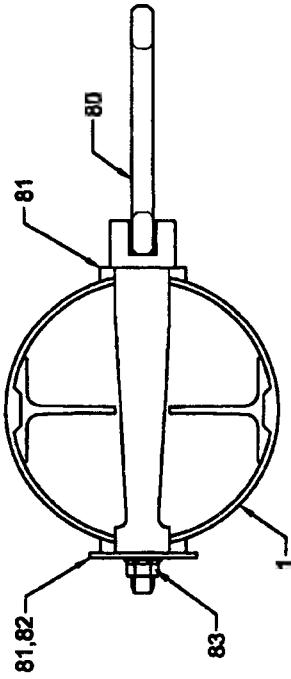
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

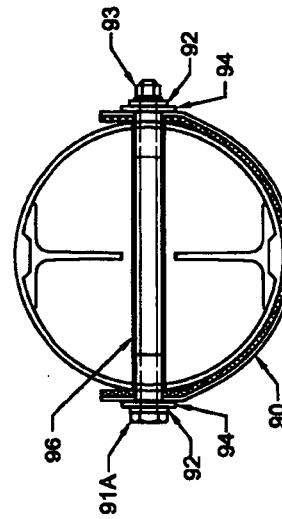


SECTION R-R
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D350-636-109 TOW RING KIT

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WORK ORDER

NO. 85746 MLJ
12/07/24



SECTION S-S
D350-636-015/-016/-017/-018/-215/-216/-217/-218
SKIDTUBES, 3 PL

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Revision: I
Date: 10.10.25

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

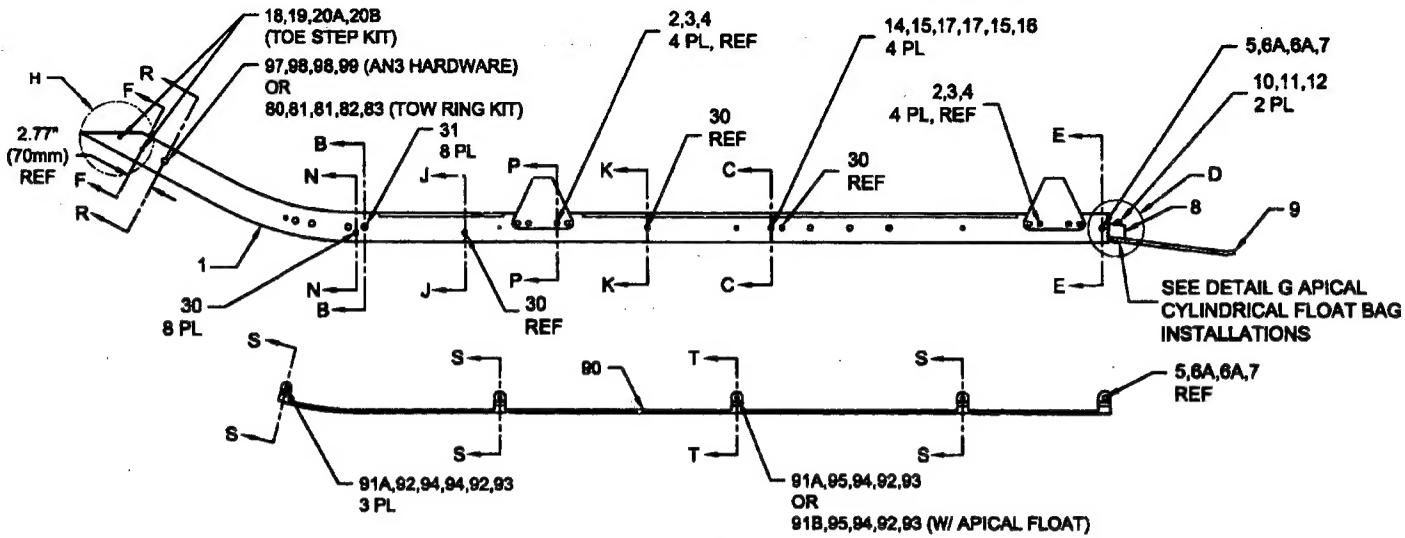
QA Closed: _____ Date: _____

Work Order:		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____ NCR No. _____		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
		Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
		Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Supplier <input type="checkbox"/>		
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									
FAULT CATEGORY									
Landing Gear	General								
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>				
	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>				
	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>				
	Crushed/Crimped. <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>				
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>					
	Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>					
	Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>				
	Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>						
	Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>						
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>						
	Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>						

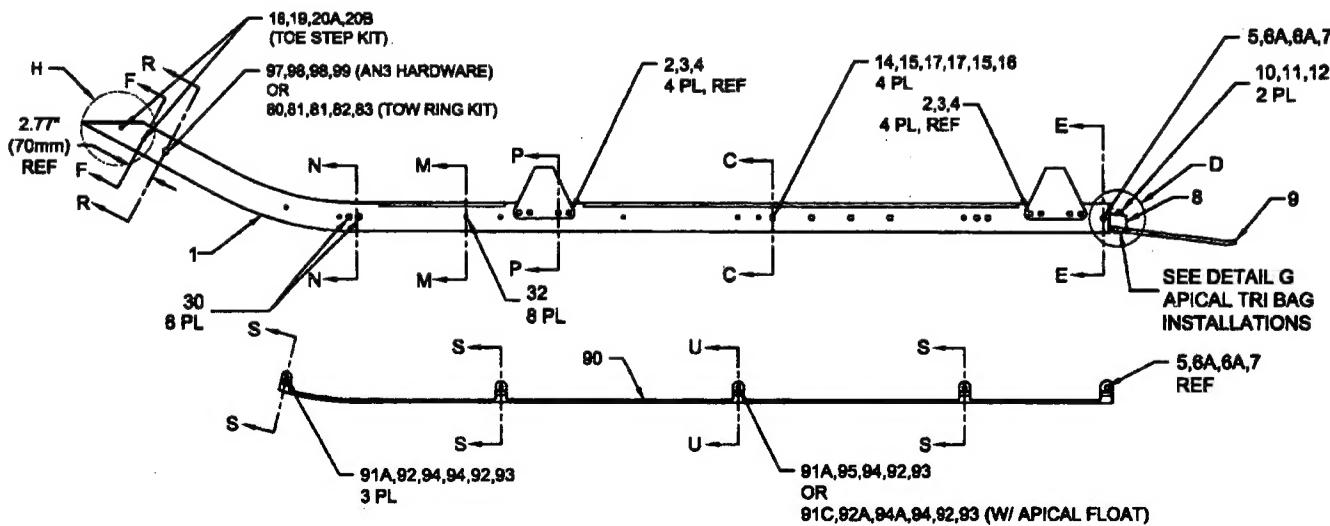
Figure 3: D350-636-015/-016/-017/-018/-215/-216/-217/-218 SKIDTUBE ASSEMBLY

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D350-636-015/-016/-215/-216
(Aerazur/Apical Cylindrical)



D350-636-017/-018/-217/-218
(Aircruiser/Apical Tri-bag)

Revision: I
Date: 10.10.25

05746

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	General			Bend	Grain			Ovalized	Pressure/Forced		
Centre Not Concentric to O/S				BOM/Route	Hardware			Over/Under tolerance	Temperature/Cure		
Cracks				Broken/Damaged	Inspection Incomplete			Part Incorrect	Weld		
Crushed/Crimped.				Burrs	Instructions Incomplete/Unclear			Part Lost/Missing	Wrong Stock Pulled		
Cuffs				Contamination	Maintenance			Part Moved			
Heat Treat				Countersink	Mislabeled			Positioned Wrong			
Inspection Strip in Tube				Cut Too Short	Misread			Power Loss/Surge			
Ripples in Bend				Drill Holes	Offset						
Torque Waves in Extrusion				Drawing	Out of Calibration						
Turning Sequence				Finish	Out of Sequence						
Wave/Twist in Tube				Folio	Outside Dimensions						

NO. 298

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job #: 87012
Part #: A350-636-014
Description: Skid tube
Welding Process: Tig Mig
Base materiel: Alum. Inox.
Current: AC DC

TEST REQUIREMENTS AND RESULTS

Visual:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Penetration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Fusion:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Cracks:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Overlap (cold lap)	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Undercut:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Pin holes:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Porosity (surface):	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Coloration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Burn through:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>

Qualifier David Elliott Date of Test Coupon 12-07-23

Welder Barclay Elliott Date of Test Coupon 12-07-23

The above named individual is qualified in accordance with AWS D17.1.2001 to weld